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SCHOOL LIFE

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THE DAIRY PROJECT OFFERS A WIDE FIELD OF STUDY

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Published Monthly, except July and August, by the Department of the Interior, Bureau of Education
Secretary of the Interior, HUBERT WORK - - - - Commissioner of Education, JOHN JAMES TIGERT

VOL. XIII

WASHINGTON, D. C., DECEMBER, 1927

No. 4

Time Has Come for Clear Definition of Institutional Functions

Flood Tide of Students is Overtaxing Facilities of Higher Educational Institutions and Has Projected New and Serious Problems. Constantly Increasing Cost will Serve as Check upon Indefinite Growth. Raised Requirements Have Reduced Some Unwieldy Student Bodies, and Some Universities Have Abandoned Two Years of College Work. Proper Emphasis upon Extracurricular Activities is Desirable

By HUBERT WORK
Secretary of the Interior

NOTHING is constant but change, and we may have arrived at a point where the modern university requires careful definition. What is the function of higher education at the present time? What are its objectives? What is the relation of the college to the university? What have we a right to expect of those who have enjoyed the opportunities and privileges of higher training at nominal cost to them, but at enormous costs contributed from many sources?

Before the late war, the American college differed little in certain respects from a manufacturing concern. A plant was erected, a faculty employed, and sources of income sought and established either through public taxation or by private bounty. These arrangements required raw material for fabrication, a student body, and active efforts were made to gather it. Advertising campaigns were waged; field agents were sent out to court patronage and good will. There was hardly a college or university that was not eager for more students.

Student Bodies Numbered in Thousands

A flood tide of students has set in, compelling more teachers, requiring additional buildings, overtaxing the facilities and accommodations of universities and colleges. Where student bodies were listed by hundreds they are now numbered in thousands. Resources which yester-

day appeared ample are to-day inadequate to meet the demands of those who seek higher learning. Some of the causes for this quest are readily discernible, chief among which, no doubt, is the era of unprecedented prosperity which we have enjoyed in recent years. Other things being equal, the patronage of the colleges and universities is directly correlated with the economic resources of the people. It is fair to suppose that a new intellectual interest has been awakened, but it is certain that never before have so many of the American people had the means to seek and secure the advantages of a college education.

How Shall Students be Selected?

The present situation in the colleges and universities has projected new and serious problems upon those responsible for their administration. Should all who apply be admitted? If so, how are they to be accommodated? If some are to be eliminated, how is the selection to be made? If there is to be a wider enjoyment of the privileges of higher education, how should this affect the curriculum and the functions of the university and the college? These are queries presented to our Government Bureau of Education and the scholarly minds of educators are taxed to answer.

A university is the resultant of many social forces. It is the complex of varied factors, some of which are not readily isolated or abstracted. At the present moment, higher education seems to be the

fashion, a passion of the American people, as politics or religion.

Beginning with a single small institution in the early part of the seventeenth century, facilities for higher education are now offered in nearly a thousand universities and colleges in the United States. I am told that these institutions at present have an enrollment of more than 800,000 students, which is approximately the number of students enrolled in colleges and universities throughout the rest of the world. This insinuating vine of higher learning has crept into all sections of the nation and blooms in the smallest communities. It is the culmination of that democratic aspiration in the hearts of the pioneers who first settled in America and whose descendants have developed it.

Can not Extinguish Aspirations of Centuries

Many have coveted learning as an intellectual pleasure, others as a possible equalizer of natural inequalities. The hope has always existed that somehow, through the advantages of education, the weak might be made strong, the poor might be made rich, and the slow might be made swift, that the burden of existence might be eased. Vain hopes often, but it is unlikely that an aspiration which has burned for three centuries in the heart of the people will suddenly be extinguished.

Nevertheless, the enormous and constantly increasing cost of maintaining our high schools and huge higher educational machinery will in itself serve as a check on an indefinite growth in our universities.

Principal portion of address before the Associated Pennsylvania Clubs, Washington, D. C., Nov. 7, 1927.

The time has come when economic necessity as well as sound educational procedure requires clear definition of institutional functions. We can not afford to take long forward steps in our expansion of higher education until we can answer more definitely than now seems possible the question of the place of the college and the university in the scheme of modern society. Educators say that no new institutions should be established and old ones should not be enlarged without a definite program and after articulation has been carefully determined.

Many Higher Institutions Have Been "Surveyed"

As a layman, I would not indicate the course that higher education should take. This is a question to try the mettle of the boldest spirits among our educational leaders. That this is the important prevailing problem among them is indicated by the fact that more than two-score institutions of higher learning, at their request, have been surveyed by the Bureau of Education of the Department of the Interior and advised as to readjustments of their curricula, since I have been its Secretary. These include 12 universities and colleges in Oregon, under a State law requiring institutions of higher learning in that State to be accredited by the United States Bureau of Education; 13 colleges and universities in Arkansas; the State University of Arizona; the higher educational systems of Massachusetts, Kansas, and Tennessee; the Agricultural College and the State College for Women in North Carolina; the State Industrial College of Georgia; Western Reserve University and Case School of Applied Science; the University of Utah and the State Agricultural College; and the State University of New Jersey. The department is now engaged in a study of 78 Negro universities and colleges at the request of the presidents of the institutions, and is making a survey of the 69 land-grant colleges.

Restlessness Can Not be Ignored

It is apparent that some solution must be found to the problems which have been raised. A well-known writer has recently advocated the abolition of the university and the college, as outworn institutions, whose functions can be better performed by other agencies and organizations in the society of the future. This is, of course, an extreme view, but we can hardly ignore the restlessness which is manifest in educational circles.

Conditions have a great tendency to right themselves, but this can be hastened by intelligent direction. Already student bodies are being made less unwieldy through special raised requirements, and over-grown institutions are bravely attempting selection. It appears that a

number of leading American universities have already indicated their purpose to abandon the first two years of the curriculum in liberal arts, long discussed. This will enable the smaller colleges to have a more definite place in the general plan of education. After two years of grounding in the languages, mathematics, and the sciences, students will be prepared to enter the universities for intensive training along professional lines or for the discovery of new knowledge through research and investigation. At present, lacking definite purpose and with only vague objectives, students are herded through some of our big institutions with little contact with instructors and with little thought for the future's demands.

Foundation Training Often Not Coherent

The general education now offered as a basis for specialized professional training and higher intensive scholarship is too often not coherent. The foundation it offers must prove inadequate to support a scholarly or professional structure. We have, on the one hand, those who have been polished in college but who have not obtained the necessary knowledge or skill to do one thing well, and, on the other hand, the ignorant specialist. Overeducation of mediocrity and undereducation of superior ability are both community evils. Most men could do twice as much if correlated and systematized, and do it better, if they would. This is largely true of school pupils also, if the value of five minutes be stressed.

If the university of the future will leave the task of preparation to the high school and the college, it ought to be able to rid itself of unwieldy masses of unfitted students and perform its proper function in the fields of professional training and the discovery of new truths. I do know that boys can be kept in universities until too old to learn how to make a living.

Must Determine What Function is Performed

We in America have reached the point where we need not only to define the place of the college and the university in the scheme of education, but, likewise and more important, we must determine what function the institution of higher learning is performing in our society. Is it the purpose of our colleges and universities to provide adornment for the intellects of persons of leisure; to enable the masses to secure the means of livelihood and enter avenues leading into the higher professions; to furnish a few years of irresponsible, but happy, social environment; or to create the possibility of fame and renown through athletic prowess or literary achievement? Are the purposes of higher learning to be found in one or all of these or similar directions? These questions are easily

asked, but it can not be said that there are one or two important services for the college or university to perform and that coincident results may be regarded in the light of by-products.

Extracurricular Activities must be Incidental

I think we can agree that the primary objects of going to college should be to secure worth-while information that will enable men and women to succeed in after life; mold sterling character, create worthy citizenship, and perpetuate all that civilization implies. If so, the curriculum of studies should provide, for the most part, the means of attaining these ends. Doubtless, the extracurriculum activities contribute in a measure to the desired results, but it should be remembered that the athletic life, the fraternal, dramatic, and other social organizations are but subsidiary and incidental to the main purposes of the curriculum, and that students who majored in them are likely to be troubled in the world.

Athletics were introduced into the college, and are justified in our educational philosophy, on the theory that strong minds develop in strong bodies and that through the medium of wholesome games, bodily strength is generated and maintained. But should athletics occupy as important a place in the minds of students and alumni as the serious work of the institutions, suggesting to students that we consider athletics a more significant phase of college life than the acquisition of sound learning or the training for good citizenship—"mistaking pastime for life's highest aim"?

More Wholesome Condition is in Prospect

We see indications that college and university authorities are moving to place proper emphasis and perspective upon the several institutional activities. A right and sound theory of education demands that the more essential things be first, and the lesser regulated. Some of our greater universities are beginning to frown upon overbuilt stadia, commercialized athletic practices, and unwarranted inducements for bringing star athletes to college. Our sister institution, the Pennsylvania State College, recently took high ground when its athletic council determined to abolish scholarships provided for athletes, and announced that in the future no "scouting" will be done in order to discover in advance the character of play of visiting teams. All may not agree with this policy, but I believe that substantially all of the alumni who have the welfare of the institution at heart will regard such steps as wholesome. They indicate that we are commencing to reevaluate the activities and objectives of the modern university.

I do not wish to be understood as decrying these activities in toto. Athletics

have a legitimate place in the school and the college. They provide a wholesome safety valve for the energy and enthusiasm of youth and are a medium for creating institutional spirit and loyalty. Fraternal organizations also have an important place in providing an opportunity for the development of the humanitarian and social instincts, but all of these are subject to limitation and by their excesses create problems on the campus.

We stand before the world to-day, the richest and most powerful nation of all time, but it may be questioned whether America is able to make a spiritual and intellectual contribution to civilization proportionate to her material resources. Our favored economic and political position at the present time may be accounted for in large measure by our steadfast faith and adherence to the principle of free universal education and the success with which we have pursued our aspirations. Serious purposes must be clearly defined; instrumentalities for the consummation of these purposes need be provided; minor objectives should be subordinated to great ends; and the future faced with courageous devotion and unswerving adherence to the visions we may be gifted to see.



American School in Mexico Needs Books

In Mexico City is an institution that is unique in foreign countries—an American school with grades from kindergarten through high school, from which students are admitted without examination to those colleges in the United States that receive students on certificate.

The teaching staff is composed of American men and women who have come from institutions in the United States. The control is under a board of trustees of American residents. Out of 700 pupils 50 per cent are Mexicans; the remainder American and other nationalities. Some are from the families of the highest Mexican officials of the country. Ambassador Morrow has just placed his daughter in this school.

An adequate home in building and grounds, free from debt, has lately been provided by local residents and patrons of the school. Two essentials are still lacking, a real library and an auditorium.

The undersigned, as a member of the library committee, is seeking to enlist the interest and help of American publishers in this work, which offers an opportunity to strengthen and improve the relations between the United States and its southern neighbors through education and right information. Good books are messengers of amity, peace, and progress. The people of Spanish-American countries need to know and understand better the

Story of the Christmas Seal Drive in Oak Park High School

Students Raised \$8,694 This Year by Sale of Christmas Seals. Interest Stimulated by Competition Between Boys and Girls; and the Girls Always Win. Idea of Service to Others Is Inculcated

By JOHN BRUNN

Student, Oak Park (Ill.) High School

BEHIND the double-barred cross which led the Crimean soldiers to victory another army wages a war, but far different from that of the ancient soldiers. It is now not a war to kill men, but to save them. Each year, in the month of December, Christmas seals are sent to the Oak Park High School of Oak Park, Ill., and it is the duty of each student to take his share and sell them. Duty, yes, but even more, a privilege and a pleasure. Some people, unacquainted with the drive, can see neither romance nor interest in the idea, but the Oak Park High School for eight years has been engaged in the drive at Christmas time, and each year has found steadily increasing enjoyment in this service to the community.

Humanity thrives on a good fight, and in the Oak Park and River Forest Township High School, the boys are pitted against the girls in the contest. The battle is fought in a desperate frenzy by the boys, since they have been forced to accept defeat for a number of years, as far back as the girls care to remember, but each new year brings them a chance to attain their rightful position.

As a result of the friendly competition, a real work is done in the community. Perhaps the most tangible evidence is the neat, stucco building situated in the center of 75,000 people, called the Oak Park Health Center. It is here that a trained nurse has her office, and booklets on the care and prevention of tuberculosis are distributed. Here, too, an eminent physician holds weekly chest clinics at which he examines the many who come for help.

Portions of essay which won first prize.

history, character, and life of the people of the United States. The youth of to-day will be the citizens to-morrow.

The chairman of the library committee is Mr. Alexander W. Weddell, the American Consul General here. He believes with the writer that this work is not only worthy but highly important. We are submitting the matter to leading American publishers in the hope that they will respond with a donation of selected volumes in any number, large or small, from their own publications—books suitable for a school library used by pupils of all ages. We are preparing a bookplate on which

But all the work is not done in the health center. In the year 1926 the nurse made 2,569 home visits that she might properly investigate cases.

The Oak Park Health Center requires money with which to operate. Water, heating, gas, salaries, electricity, and many other little things are paid for by Christmas seals. In the few weeks that seals are sold enough money is raised to support the activities of the center—and more. The money required for one year is about \$5,000, and since the students are able to send more than \$8,000 the health center sends the surplus money to centers which are not self-supporting.

Undoubtedly these students and all others who took part in the drive obtained a great deal of good from it. Salesmanship was taught, but there was a value greater and far more important received. This was the idea of service to others. The scholastic side of life is well taken care of in the schools by the studies, the social life by the clubs, the physical side by athletics, but the idea of having a brotherly feeling for others is taken care of by the stamp drive. Realizing the value and joy of service is one of the greatest things that can be learned.

The Oak Park High School has worked for 10 years persistently and willingly on this project. It has made possible the prevention and treatment of tuberculosis in its community. It has supported 236 clinics at which people were examined in 1926. It has contributed an average amount of \$7,250 in the last five years. It pays a full-time specially trained nurse, and it can proudly write after its name, "Holder of world's record in sale of Christmas seals."



the name of the donor will be inscribed in each volume.—S. W. Rider, Apartado 123 Bis, Mexico City, Mexico.

Graduate schools of education were attended this summer by the county superintendent and 11 of the 13 principals of township high schools in Kosciusko County, Ind. The two principals who did not attend hold M. A. degrees. Of the 189 teachers of county schools, 80 per cent spent either the summer or the previous school year in study in colleges or normal schools.

Foreign Projects of Children's Fund of American Junior Red Cross

Fund Established to Continue Relief Work Begun During World War. Enterprises Undertaken in Many European Countries, Asia, and American Islands. Outstanding Project is Maintenance of Albanian Vocational School

By ELLEN McBRYDE BROWN
American Junior Red Cross

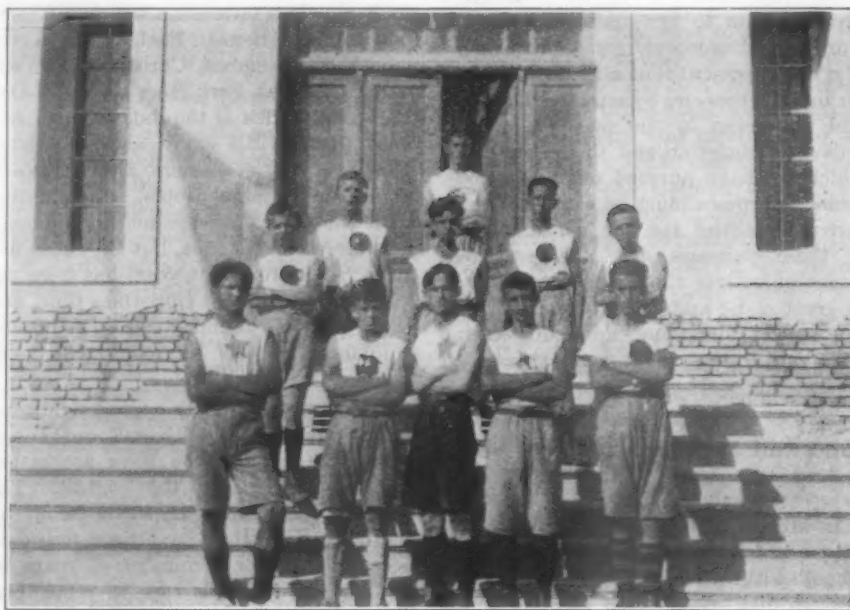
NATIONAL CHILDREN'S FUND was established in 1919 by the American Junior Red Cross to continue the relief work for children begun in Europe during the World War by students in American schools. The earliest projects were in France and Belgium. Since then, enterprises have been undertaken in almost every country of Europe, in some parts of Asia, in our own country, and in the islands of the sea. The million and a quarter dollars invested was earned or saved by personal sacrifices.

Children's Fund Stimulates Local Activity

Most of the projects are in time taken over by people in the country concerned, often by Junior Red Cross groups. The organization of such groups in some 40 countries has been inspired and in some cases helped by the children's fund. About 25 Junior Red Cross magazines are now published, and some of them are underwritten temporarily by American juniors. This is valuable service because some countries lack suitable children's literature.

Some of the calls upon the children's fund continue from year to year. Such is its use for disaster relief abroad, for ex-

ample, aid to Japanese boys and girls after the earthquake. The fund finances the annual shipment of Christmas boxes for



Albanian boys enter heartily into American sports

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many children who have had little Christmas since the war. These boxes go to 18 European countries and to Haiti, Porto

and to provide instruction in swimming and life-saving in Estonia. By such means our school children have introduced the "health game" by which boys and girls all over Europe are competing in health-giving activities.

In the field of art, the children's fund has provided materials for handwork in the native arts of Rumania, Hungary, Greece, and other countries. It kept in existence the famous children's art class of Professor Cizek at Vienna.

Direct Service to Educational Enterprises

The following are examples of projects giving direct service to educational enterprises: Establishing a school for cripples in Prague; supplying seed and tools for agricultural undertakings, including the famous medicinal herb gardens of Poland; and helping found orphanage schools in eight countries of Europe.

In all children's fund undertakings the aim is immediate relief and also the initiation of projects providing such occupation to the boys and girls helped as will restore a normal outlook on life and inspire confidence in their own ability to help themselves and others.



The school shop at Tirana has the only modern plant in Albania

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Boards for the new building were sawed by primitive methods

These comprehensive projects are intended also to benefit students in our own schools. They give practice in earning and handling money, enable the pupils to put knowledge into practice and aid in unifying the curriculum. The civic value of this continuous experience in national and international cooperation is evidenced in many ways. For example, in Shoumen, Bulgaria, there is a school for Russian refugee boys and girls. This school was "adopted" by the Bulgarian Junior Red Cross which owes its origin to assistance from America. When, out of their slender resources, the Bulgarian children attempted to help these destitute refugees, the American children's fund furnished materials for the Bulgarians to use in making clothing for the Russians. The international cycle was completed during the Mississippi flood when these Russian refugees sacrificed their breakfasts for several days and sent the money saved for the relief of American children.

Albanian Vocational School at Tirana

Among the most striking of present undertakings of the National Children's Fund of the American Junior Red Cross is support of the Albanian Vocational School at Tirana. Of this school it has been said that "perhaps nowhere else in

the world is so much real bedrock educational work being done with less equipment and less expenditure." President Ahmet Zogu considers the school as "Albania's most priceless asset."

The vocational school was opened in 1921 by the American Junior Red Cross and is still largely maintained by them, although ultimately the school, with the aid of the Government, will be able to take care of itself. At the time of its founding, there were only three other secondary schools in the country and no industrial or technical schools.

At the end of the first year the Government turned over to the school the unfinished "Albanian College" begun by the Young Turks in 1910. Everyone helped with the building. Timber was cut in the national forest reserve on the 27th of the month because if cut on that lucky day it would last for 700 years. The logs were floated to the sea and up the coast to Durazzo where an abandoned military railroad was rehabilitated to carry them to Tirana. Boards were cut from them by great handsaws as had been done for many generations. Bricks were made by workers from Kavaja, from time immemorial the pottery center of the

country. Prisoners were sent by the Government to dig the foundations. The walls were laid by the men of Dibra who are said to be "born with trowels in their hands." The boys of the school worked enthusiastically. When completed, it was the finest building in Albania. This building and the installation of machinery for the first instruction in manual arts was under the supervision of a mechanical engineer who is a native Albanian and a graduate of the University of Malta. At the dedication ceremonies he started the machinery of the only thoroughly modern plant in the country with the words: "You revolving irons, which obey those who are able to order you, I order you to be obedient to the boys of the Albanian Vocational School in the formation of the Albanian Industrial State. Take your good and eternal way and be it the will of the Great God that you may help this State as you have helped other States and that you may prepare a suitable place for this Nation among the places of other nations which are the wonder of the world."

Instruction is in English Language

Admission to the school is by competitive examination in the elementary schools. Instruction in mechanics, carpentry, electricity, and agriculture is in the English language at the request of the Albanian Government, since the native language, long suppressed by the Turks, does not contain the essential technical terminology. There are now about 200 students and 16 teachers. The school has a student council, a student bank, a co-operative store, a dramatic club, athletic teams, and an unusually good school paper, "Laboremus," printed by the students themselves.

The spirit of the students is shown by the strenuous efforts and sacrifices they



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Steel plows drawn by a tractor have superseded the ancient equipment

make to enter and remain in school. A cobbler's apprentice in Durazzo walked 40 miles to Tirana and presented himself to the director with the words: "I am 13 years old. I have no money and no tools, but my mind desires knowledge as a

save for our own, is the dearest land of all. Our mothers and fathers, unfortunate in that they had no opportunities for school, fortunate in that their sons have had such opportunities, from the deepest well of their hearts send their

emphasis be given in schools to morality, courtesy, obedience to law, respect for the flag of the United States, the constitutions of the United States and the State of Nebraska, and other attributes which tend to promote upright citizenship. Separate outlines are provided for the nursery school and kindergarten, primary grades, intermediate grades, and junior and senior high school.

As time for preparation of the course was limited, the present text is considered tentative, and it is expected that constructive criticism by teachers and citizens will assist in the development of a course that will enable the schools to accomplish all that they can be fairly expected to achieve in character education.



Approved methods of irrigation are taught to schoolboys

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desert desires rain. If you will buy for me a set of cobbler's tools, which will cost 100 lira, I will work every hour I am not studying or sleeping. I will make and mend all the shoes for the school. When I am a man I will pay back the hundred lira."

The school has already accomplished much for itself and for the country as a whole. Tirana is the only town in Albania with electric lights. These are supplied by a plant maintained at the school and operated by the boys themselves, who are keenly anxious to "make" the light plant crew. The school has one of the three ice plants in the country. The school shops make woodwork for public buildings. It has been recommended that the new American Legation in Tirana be built by the boys. The machine shop makes apparatus which would otherwise have to be imported at heavy expense. A tractor, something unheard of before in Albania, plows the school farm. An example of repair work done outside the school was the engine of the village mill at Cherma which had broken down and remained unused for seven years because nobody knew how to repair it. The people had been carrying their wheat 15 miles over rough mountain trails to another mill until the boys at the school repaired the engine.

Have Opportunities Unknown to Fathers

In 1926 the first class was graduated. One of the graduates, speaking for the class, said in part: "No words of ours can express our gratitude toward you, boys and girls of that other land, which

greeting and thanks to the mothers and fathers of the children of the American Junior Red Cross for the blessing they have bestowed."



New Nebraska Law Requires Character Education

A course of study in character education, published recently by the Nebraska State Department of Education, was introduced this fall in schools of the State. This is in conformity with an act passed by the 1927 session of the legislature, requiring that beginning this year special

Free Instruction in Italian for Finns

Count Pagliano, the Italian minister to Finland, has decided to organize in Helsingfors free courses in the Italian language, in order to bring closer Italian and Finnish relations. Two different courses will be arranged, both free of charge. The first course will give instruction in grammar and the second course will give instruction in conversation on musical, legal, technical, and military matters. In each course two lessons a week will be taught by natives of Italy. In addition to this, a small reading room will be established for persons who desire to read Italian newspapers and periodicals. An information bureau for students will also be maintained, which it is hoped will prove to be especially useful for professors and students in the university and high schools and for journalists and persons who intend to travel in Italy.—*Barton Hall, American Chargé d'Affaires, Helsingfors.*



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The farm had been worked for generations, but only the surface soil had been turned

Visual Education Aided by Parent-Teacher Associations

Associations Throughout the Country are Supplying Visual Equipment to Schools Which Can Not Procure it Otherwise. National Congress of Parents and Teachers Maintains Active Committee on Motion Pictures

By MILDRED RUMBOLD WILKINSON
National Congress of Parents and Teachers

VISUAL education is becoming an important factor in both home and school life. The visual department of the Los Angeles public schools made a test of the educational value of the motion picture. In a third grade a class was shown the film of "Nanook of the North" which was supplemented by lantern slides and exhibits. Another class of third-grade children was given the usual verbal instruction upon the subjects covered by the film. Later the same examination was given both groups, with the result that the group receiving the information through the eye showed 37 per cent greater knowledge than the other group.

In every part of the country, especially in the rural districts, parent-teacher associations are aiding the schools by supplying visual education equipment where it is most needed and when the school budgets are inadequate.

It is estimated that in the United States from fifteen to twenty million people attend the movies regularly. Eighty per cent of this number are under 24 years of age, and it is this group of young people which constitutes "the community movie problem."

Booklet Contains Useful Suggestions

Mrs. Morey V. Kerns, of Philadelphia, Pa., is the motion picture chairman for the National Congress of Parents and Teachers. She has recently published a booklet called "Motion Pictures" which gives suggestions for committee work, an alphabetical list of recommended films with blank pages for supplementary lists, names and addresses of motion picture distributors, sources for nontheatrical pictures, and a short bibliography on the subject. This booklet may be obtained at a nominal price by writing to the National Congress of Parents and Teachers, 1201 Sixteenth Street NW., Washington, D. C.

The University of California has issued a booklet of classified films of 1 to 12 reels, covering many subjects. These films can be rented by schools and clubs. The executive secretary of the visual instruction department states that an average of 770 motion-picture films and 22 sets of slides were distributed monthly

last year. Many other universities are carrying on similar work.

The Los Angeles Federation of Parent-Teacher Associations has a regular meeting the first Wednesday of each month for all motion-picture chairmen for discussion and information on the motion-picture problem.

In the fourteenth district of California one Congregational Church shows films that are listed in the Child Welfare Magazine. In this district the movie theater manager cooperates with the Analy Federation of Parent-Teacher Associations in furnishing tickets to some of the educational films for children who can not afford to buy them.

State Congress Adopts Fixed Policies

Mrs. Ercel McAteer, assistant director of the visual education department of the Los Angeles schools, has been appointed State chairman of visual education for the California Congress of Parents and Teachers. Mrs. McAteer attended the State board meeting in Santa Cruz in August and presented the following policies of her department, which were accepted:

1. Cultivate the taste of both adults and children for worth-while photoplays and give them pleasure of a finer kind.
2. Introduce the child to the wonders and beauties of nature.
3. Help the child to understand people and inculcate ideals of character and conduct.
4. Bring about closer affiliation of district film chairmen and those persons in the various school systems immediately interested in visual education.
5. Cause a fuller realization of the definite obligation of parents to children for a more careful selection of the films they permit their children to witness.
6. Make a careful list of the finer productions.
7. Formation of adult groups for the study of the psychological effect of different types of photoplays upon children.
8. Adult survey of exhibitor's reaction to public desires in smaller communities.
9. Encourage parent attendance not only for chaperonage but for mutual discussion, enjoyment, and companionship.

For the past four years the better films committee of the Nashville (Tenn.) Council of Parent-Teacher Associations has visited motion-picture and vaudeville shows reporting those meeting their approval and making no mention of the others. This report is sent to the motion-picture chairman of each association and the reports are placed on the bulletin

boards in the schools for the benefit of parents and students.

The motion-picture chairman of New York branch is giving cooperation to towns and rural districts desiring junior movies.

Yale University has done a big thing for visual education by dramatizing the history of our country from Columbus through the Civil War, and at great expense has made these films available to organizations throughout the country. The University of Indiana having leased these films is renting them to schools and organizations, and the motion picture chairman of the Indiana branch is cooperating with the bureau of visual instruction of the university by working with the parent-teacher associations throughout the State in procuring these films for their schools.

Child Welfare Magazine, the official organ of the National Congress of Parents and Teachers, carries a monthly article by Mrs. Morey V. Kerns on "What to See in the Movies." Mrs. Kerns says in her booklet: "Our National and State organizations, reaching as they do into the very hearts and homes of our people, should ever keep before them that the film is the most potent factor in young life at the present time and the entertainment film is the problem that needs more specific attention from every one of the 18,000 units which make up the National Congress of Parents and Teachers."



Ceramic Arts in Detroit High School

Knowledge of ceramic art in its relation to historic periods as well as from a technical standpoint is the aim of the pottery course in Eastern High School, Detroit, Mich. The school possesses a collection of Indian, Italian, Spanish, Japanese, and modern pottery, and frequent visits are made to the Art Institute to study historic examples. In the second semester Indian, Egyptian, and Grecian work illustrate the progress of pottery, and students are expected to produce pieces typical of those periods. Visits to a commercial pottery are made by advanced pupils to observe modern methods. Pottery courses in evening classes are identical with those in the high school, and are attended by many teachers and commercial artists. Work of high order is done.



A kitchen open to full view features the cafeteria in Frances E. Willard School, Long Beach, Calif. It enables pupils to observe all methods used in the preparation of food and at the same time those charged with the duty of supervision can see pupils as they are eating at the tables.

Secondary Schools of Southern and of North Central Association

North Central Schools Are in General Larger than Southern Schools. Greater Proportion of Graduates of Southern High Schools Go to College. North Central Teachers Show the Better Academic and Professional Training, for all Must Hold Degrees. Too Many Teachers Are Overloaded in Both Associations. Extracurricular Activities Better Developed in Southern Association

By JOSEPH ROEMER

Professor of Secondary Education, University of Florida; Secretary to the Commission on Secondary Schools, Association of Colleges and Secondary Schools of the Southern States

(Continued from SCHOOL LIFE for November, p. 48)

AS MENTIONED in the part of this article which appeared in the November number of SCHOOL LIFE, this study is similar to studies issued at intervals by the North Central Association of Colleges and Secondary Schools. The latest of these studies of the North Central Association is entitled "Our Secondary Schools," and was prepared by Dr. C. O. Davis.

In order to compare conditions in the areas covered by these two standardizing agencies, a comparison is made here of a few of the important phases of the work. The purpose of it is merely to give one a bird's-eye view of the conditions in the two areas. The reader must bear in mind that the data for the North Central Association are for the year of 1924-25 and the Southern Association for the scholastic year of 1926-27. The comparative data follow:

Comparison of certain items of the secondary schools of north central and southern associations

Items	North Central Association (1924-25)	Southern Association (1926-27)
States included.....	20	11
Secondary schools accredited.....	1,797	844
Teachers employed.....	30,732	11,807
Pupil enrollment.....	678,935	283,127
Schools enrolling more than 1,000.....per cent..	9.0	4.8
Schools enrolling fewer than 100.....per cent..	13.3	17.9
Average number pupils per public school.....	432	371
Average number teachers per public school.....	19.5	14.4
Median number periods in school day.....	7 or 8	7 or 8
Median number days actually in session.....	180	177
Median length of class period.....	41 to 45	41 to 45
Units required for graduation.....	15	16
Typical number grades in high school.....	9 to 12	8 to 11
Boys in total enrollment, per cent.....	47.5	47.1
Average number pupils per teacher.....	23	24
High-school graduates.....	109,932	44,533
Boys in high-school graduates.....per cent..	43.8	43.2
High-school graduates going to college.....per cent..	37.9	48.2
Boy graduates going to college.....per cent..	42.4	51.2
Nonresident pupils.....do.....	12.9	9.3

Comparison of certain items of the secondary schools of north central and southern associations—Continued

Items	North Central Association (1924-25)	Southern Association (1926-27)
High-school principals who do no teaching.....per cent..	29.9	26.6
Teachers of academic branches.....per cent..	67.8	84
Academic teachers new to particular school.....per cent..	27.2	24.4
Vocational teachers new to particular school.....per cent..	24.6	24.6
Academic teachers with bachelor's degree.....per cent..	80.9	80.4
Academic teachers with master's degree.....per cent..	12.5	11
Academic teachers with Ph. D. degree.....per cent..	.9	.2
Vocational teachers with bachelor's degree.....per cent..	45.6	60
Vocational teachers with master's degree.....per cent..	2.9	2.6
Vocational teachers with Ph. D. degree.....per cent..	.7	0
Academic teachers with 15 hours in education.....per cent..	82.8	68.9
Academic teachers with from 11 to 15 hours in education.....per cent..	12.8	11.7
Academic teachers with some training in education but less than 11 hours.....per cent..	3.3	10
Academic teachers in summer sessions since 1920.....per cent..	47.7	61.7
Vocational teachers in summer sessions since 1920.....per cent..	55.1	48
Academic teachers with no experience.....per cent..	6.8	5.6
Academic teachers with more than 5 years' experience.....per cent..	55.8	55.5
Vocational teachers with no experience.....per cent..	6.5	6.1
Vocational teachers with more than 5 years' experience.....per cent..	54	46.9
Academic teachers teaching 6 or more classes daily.....per cent..	18.4	13.7
Academic teachers teaching 5 classes daily.....per cent..	53.6	54.2
Vocational teachers teaching 6 or more classes daily.....per cent..	21.6	18.8
Vocational teachers teaching 5 classes daily.....per cent..	31.3	28.6
Academic teachers teaching fewer than 150 pupils daily.....per cent..	88.1	90.3
Vocational teachers teaching fewer than 150 pupils daily.....per cent..	87	92.5
Academic classes enrolling more than 30 pupils.....per cent..	10.6	9.9
Vocational classes enrolling more than 30 pupils.....per cent..	13.9	7.6
All teachers devoting some time to extracurricular activities.....per cent..	34.6	43.6
Median annual salary of teachers (approximately).....	1,800	1,650
Having full-time librarian.....per cent..	31.6	23.8
Having part-time librarian.....per cent..	55.1	55.8
Having some form of supervised study.....per cent..	47.2	63.5
Using figures in recording marks.....per cent..	48.8	57.7
Using letters in recording marks.....per cent..	49.1	37.7

Comparison of certain items of the secondary schools of north central and southern associations—Continued

Items	North Central Association (1924-25)	Southern Association (1926-27)
Employing a system of honor points.....per cent..	26.9	19.8
Having national honor societies.....per cent..	15.8	4.6
With pupils belonging to secret societies.....per cent..	6.5	4.8
With pupil government organizations.....per cent..	30.3	45.2
Having teacher pupil councils.....per cent..	57.7	55
Schools having paid school physician.....per cent..	13.3	13.4
Schools having paid school dentist.....per cent..	6.4	4.7
Schools having paid school nurse.....per cent..	32.5	23.6
Schools having paid athletic coach.....per cent..	70.7	86.9
Schools favoring 60-minute class period.....per cent..	48.4	51.6
Having same salary schedule for elementary and high school teachers with same qualifications.....per cent..	17.9	20.6
Giving inexperienced teachers fewer classes.....per cent..	46.7	49.2
Schools publishing paper.....do.....	64.5	54.7
Schools having football teams.....per cent..	85.9	80
Schools having—		
Auditoriums.....do.....	84.5	91.7
Gymnasiums.....do.....	82.6	47.5
Swimming pool.....do.....	10.7	8.5
Shower baths.....do.....	53.7	76.8
Rest room for teachers.....do.....	68.6	69.8
Health clinic rooms.....do.....	26.2	30
Library room.....do.....	82.2	90.6
Lunch room.....do.....	53.5	53.4
Club room or activities room.....per cent..	18.6	27.2
Manual training room.....do.....	82.2	38.9
Home economics room.....do.....	59.3	76.5
Music room.....do.....	59.6	63.5
Fine arts room.....do.....	30.5	18.8
Boy or girl scout room.....do.....	9.4	9.1
Adequate athletic and playground field.....per cent..	75.4	80
Electric lighting.....do.....	96.7	92.8

On the whole one is struck in reading these comparative data by the great similarity of conditions in the two associations. In fact, in many instances there is very little, if any, real difference.

It is evident that the North Central Association secondary schools are larger than those of the Southern. Nine per cent of them enroll more than 1,000 pupils and only 4.8 per cent of those in the Southern Association enroll more than 1,000. Again the average number of

pupils per school in the North Central Association is 432, and in the Southern Association, 371; and the average number of teachers per school is 19.5 for the North Central Association and 14.4 for the Southern Association.

Again, it is interesting to note that a larger percentage of the high school graduates go to college in the Southern Association than in the North Central Association. The percentages are 48.2 per cent and 37.9 per cent, respectively.

A much larger percentage of all the teachers are vocational in the North Central Association than in the Southern. In the North Central Association 32.2 per cent of all the teachers are vocational, and in the Southern Association only 16 per cent are vocational.

The North Central Association requires all teachers to hold degrees from standard colleges, while the Southern Association requires 75 per cent to hold degrees. In actual practice, the North Central has 94.3 per cent of its teachers with a bachelor's degree or more, while the Southern Association has 91.6 per cent with bachelor's degrees or more—an advantage of 2.7 per cent in favor of the North Central Association.

Of the vocational teachers in the North Central Association, only 49.2 per cent have bachelor's degrees or more; while 62.6 per cent of the vocational teachers in the Southern Association have bachelor's degrees or more—an advantage of 13.4 per cent in favor of the Southern Association.

North Central Teachers Better Trained

Again, 82.8 per cent of the academic teachers in the North Central Association and 68.9 per cent in the Southern Association have had 15 or more hours in education; and 12.8 per cent in the North Central Association and 11.7 per cent in the Southern Association have had from 11 to 15 hours in education. In other words, 95.6 per cent of the teachers in the North Central Association and 80.6 per cent of the teachers in the Southern Association have had 11 or more hours in education. This is an advantage of 15 per cent in favor of the North Central Association teachers.

Although the academic teachers of the North Central Association are better trained academically and professionally, the teachers of the Southern Association are attending summer schools in much greater numbers to make up the deficiency. Only 47.7 per cent of the teachers in the North Central Association have attended summer school since 1920, as compared with 61.7 per cent of those in the Southern Association.

There seems to be a decided tendency, in the North Central Association especially, to overload the teacher—18.4 per cent of all academic teachers teach six or

more classes daily, as compared with 13.7 per cent in the Southern Association. This same tendency is seen also for the vocational teachers—21.6 per cent of them in the North Central Association and 18.8 per cent in the Southern Association teach six or more classes daily. A study of the percentages of classes enrolling over 30 pupils bears out still further this situation.

It is interesting to note that 47.2 per cent of the schools in the North Central Association, and 63.5 per cent of those in the Southern Association have some form of supervised study. This means that 16.3 per cent more schools in the Southern Association than in the North Central Association have supervised study.

Honor Societies not Common in South

Nearly four times as many North Central Association schools have national honor societies as Southern Association schools have. This is probably due to the fact that the organization is rather sectional as yet in its development, and that it is in the North Central territory.

Again we can say, in general, that the southern high school has its extra-curricular activities better developed than the North Central high school does. This is shown by both the number of activities and time teachers devote to that work.

The North Central high school far outstrips the Southern high school in its equipment for industrial education for both boys and girls. The Southern high school seems to be a bit stronger on equipment for athletics, physical education, and the extracurricular activities, and the North Central high school leads in its equipment in gymnasiums, swimming pools, and shower baths. This last seeming weakness on the part of the southern high school is due largely to the climatic conditions which render this equipment unnecessary in many instances.



Evening Manual Training School for Adults

A pupil absent two or three times without valid excuse is dropped from the roll and his place filled from the waiting list in the manual training department of Evening School 60, Buffalo, N. Y.; consequently the attendance of the 30 pupils enrolled is nearly perfect. The school has a modern well-equipped cabinetmaker's shop to which only adults are admitted. Many of the pupils are newly married men interested in making furniture for their homes. The wives or sweethearts of a number of the men at the same time attend evening classes in reedwork and sewing for the purpose of making home furnishings.

London Schools Emphasize Open-air Education

Arrangements made by the London County Council for the furtherance of open-air education include out-door activities for normal children and remedial measures for those who are anemic or debilitated. In favorable weather physical exercises are taken in the school playground, and classes often adjourn there for other subjects. In all new schools efforts are being made, by cross ventilation and casement windows, to secure to the normal child the maximum amount of fresh air and sunlight. For ailing children, day and residential open-air schools and open-air classes have been opened.

The residential open-air schools are the King's Canadian School for boys in Bushy Park, near Hampton Court; Wanstead House School for girls at Margate, and Barham House School for boys and girls at St. Leonards-on-Sea. Children usually stay at these schools from four to six weeks. They are admitted on the certificate of the school doctor; their fares to and from the school are paid by the Council. The dietary is approved by the school medical officer. The amount of the parental contributions toward maintenance is decided by the school care committees.

The day open-air schools accommodate boys and girls who have been selected by the school medical officer from those children in the neighboring elementary schools who appear likely to benefit from an education under open-air conditions. Six such schools have been opened, and it is probable that three more will be opened in the next few years. The physical condition of the children is kept under regular observation. Three meals a day are provided at the schools, and the parents are required to pay for these in accordance with their means. The average length of stay at day open-air schools is about 18 months.

Open-air classes are also held in parks, playgrounds, and other open spaces. The classes may be composed of children from one school only or from a number of neighboring schools. Special furniture and equipment, including awnings and wind screens, are supplied.—“*The London Education Service*,” 1927, published by the Education Committee, London County Council.



A perfect score was made by more than 500 of the 900 school children of Detroit who participated recently in a music memory test, the concluding feature of a concert course provided for public-school pupils by the Detroit Symphony Society.

SCHOOL LIFE

ISSUED MONTHLY, EXCEPT JULY AND AUGUST
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Editor - - - - - JAMES C. BOYKIN

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DECEMBER, 1927

Public Education Services of London and New York

"THE LONDON Education Service," eighth edition, with accompanying "Fundamental Statistics, 1927," has just come to us from the education officer for the London county council, Mr. G. H. Gater. A highly illuminating and attractive document it is, substantial in subject matter, impeccable in English composition, and artistic in appearance. It sets forth in detail the education services of the great city which by its imperial circumstances as "the largest local educational authority in the world," and the metropolis of the Empire, as well as by its outstanding experimental and pioneer work, is the archetype and exemplar for the smaller education authorities of Britain and the authorities overseas. American schoolmen may read the book with profit even though they may patriotically consider that in many respects achievement in this country has been superior.

Comparison with America's greatest city is naturally suggested because of similarity of magnitude, whether New York may or may not claim that educational leadership in America which the London school officers clearly feel their right in British public education.

Neither the administrative county of London nor the city of New York includes the whole of the area which is in fact a part of its metropolitan community. The "outer ring" of London holds a population nearly equal to that of the county itself; and New York City reaches far beyond its formal boundaries. Much of New Jersey is so closely connected with it by business and social interests and by telephone, ferries, and tubes that the congeries comprises a single city, divided only by political lines. But the administrative units of London and New York afford the only bases of comparison that we have.

The population of the county of London in 1926 is estimated by the registrar general at 4,615,400. That of New York City at the same date is esti-

mated by the Bureau of Vital Statistics at 5,924,139. London embraces an area of 74,850 acres; New York, 191,681. Considering the whole, London's population is the more congested, for New York takes in Queens and Richmond Boroughs, which are in part of suburban character; Manhattan Borough has about 170 inhabitants to the acre. Similar congestion undoubtedly exists in some of the districts of London.

Both cities maintain schools for normal children of all ages and classes, for children who are defective mentally, physically, or morally, for youths beyond the compulsory school age, and for adults; and both do much of welfare work supplementary to education. Many differences appear, of course. London schools may receive children as young as 2 years old, but the one nursery school maintained and the eight others aided by the London county council do not provide for any considerable proportion of the population of that age. They are usually in the poor districts and receive children whose social condition or health is unsatisfactory. Kindergartens, but no nursery schools, are supported from public funds in New York. The school board of Los Angeles, Calif., however, maintains 16 or more day nursery schools, receiving babes as young as 9 months old; and Grand Rapids, Kalamazoo, and Chicago have infant schools which are public in all respects except that salaries of teachers are paid by private organizations.

Upon entering school, normally at 5 years of age, it is customary for the London child to be enrolled in the infants' department. He is usually transferred to the "senior department" at about the age of 7.

Ninety-five per cent of the full-time pupils of London are instructed in the elementary schools, whose curriculum covers seven years. At about the age of 11, or in Standard V, the ablest pupils are chosen for transfer to secondary schools, which are commonly preparatory to higher study and emphasize the humanities. Twenty-eight secondary schools are "maintained" by the county of London and 51 are "aided"; their enrollment is 32,047.

The pupils next in ability to those selected for the secondary schools are transferred to "central schools," which are apparently considered a part of the elementary system, but they retain their pupils for 4 years, or until about the age of 16. They have a general curriculum but they stress business and industrial subjects. Seventy-four schools of this type are reported, with 936 teachers and 23,300 pupils.

Those who are left in the elementary schools after this double skimming are of

a lower order of ability. They may remain in school until the end of the school year in which they reach 14, but few continue after that age.

Fees are required for instruction in the London "higher schools," but exhibitions, bursaries, and scholarships provide wholly or in part for about 25,000 pupils.

It is in the development of high schools that American cities, with New York leading in numbers, excel all others. London has but 55,347 students in secondary schools and central schools combined; but in her high schools and junior high schools, New York enrolls 215,783 pupils—nearly four times as many.

For the training of teachers London conducts five training colleges, two of which are residential institutions. The majority of the students take a course extending over two years, but the curriculum of the London Day Training College covers four years. The enrollment in the five colleges was 1,398 in 1926. New York maintains three teacher-training schools, with 4,477 students enrolled, but the College of the City of New York, principally for men, and Hunter College, for women, also prepare teachers for both high and elementary schools.

Both these are institutions of collegiate grade, and both are supported by the city of New York, but each has a board of trustees separate from the city board of education. The University of London is not controlled by the London county council, but the London Day Training College is maintained entirely by the council, although it is one of the schools of the university. Considerable annual grants are made by the council to other schools of the university and to the university itself.

Highly profitable it would be to describe the special schools of London or of New York—the trade and vocational schools, the school medical service, the men's institutes, and a score of other features of each school system; but to do so would require a volume.

Comparisons of many of the statistical items common to both cities are difficult or impossible because of differences in terminology. What American can read with understanding statistical statements in which the student personnel in four successive classes of schools are described as "Pupils. Average roll," "Average attendance," "Pupils," and "Enrollment"? How can these be combined to form a total? And what conclusion can we reach when the "total number of pupils in elementary schools" is reported in 1925 as 665,000, and the "total number in attendance" in 1927 is said to be 629,083? It can only be conjectured whether either of these is properly comparable with the 878,399 different pupils enrolled in the

kindergartens and elementary schools of New York in 1926.

To compare costs is equally difficult. Only one common item can be compared with reasonable confidence. The "estimated total gross maintenance expenditure on all education services" for the London county council is stated at £12,764,595, or, at the normal rate of exchange, \$62,035,932. And the "total disbursements from all funds for all purposes" by the New York board of education for the year 1926 was \$122,630,006.45, or \$20.70 per capita of the estimated total population. This does not include the cost of the two colleges of the city, which do not appear in the accounts of the board of education; but the total for London does include £100,635 granted to university education. Subtract this and the remainder, \$61,546,846—that is, \$13.33 per capita of estimated total population—would seem to be comparable with the total expenditure of the New York City Board of Education.

Pensions Involve no Expense to Nashville Teachers

Contributions to the pension fund are not required from public-school teachers of Nashville, Tenn. Taxation not exceeding one-tenth of 1 mill of assessed valuation provides the moneys required.

Pensions correspond with the pay of beginning teachers, the idea being that the beginning teacher receives the minimum for living requirements. The pay of the pensioner varies from time to time, therefore, with the changes in the pay of beginning teachers. This unique provision will prevent the distressing conditions that came to pass during the inflated period when set pensions did not provide a living.

The salary scale adopted in October, 1927, provides \$1,200 a year for beginning teachers, although 20 "cadets," teachers in training, receive \$720 a year each. No pension may exceed one-half the salary of the teacher at the time of his retirement; however, and it happens that the smallest pension paid is \$600 a year. Seventeen teachers are now on the retired list.—*H. C. Weber, superintendent of schools, Nashville, Tenn.*

Services of a trained librarian are available for pupils in junior and senior high schools of Denver, Colo., and similar service will be gradually extended through the elementary schools. Since 1920 school librarians have been placed on the teachers' salary schedule, and the same standards are required for them as for teachers. A supervisor of libraries was appointed in 1924.

How Teachers May Aid The Medical Inspection Program

By FLORENCE A. SHERMAN

Assistant Medical Inspector of Schools, New York State Department of Education

BY BELIEVING in periodic health examinations and having one at least once a year.

By showing a keen interest in health and in the school health program, thus stimulating the interest of children in it.

By urging the appointment of the school doctor as early after the opening of school as possible, in order to permit the follow-up of defects found and bring about as early as possible corrective needs.

By recording the weights and measurements of children before the doctor comes and making, if possible, the vision and hearing tests.

By assisting the doctor when he makes the physical examinations, noting the findings on the physical-record cards, talking over with him the individual child found to have defects, in order to be better able to aid in the corrective measures.

By preserving carefully all health records, keeping them intact and in the classroom so that they may be available at all times to the school authorities.

By seeing that the health records of every child are sent on from grade to grade and from school to school, thus aiding in developing a constructive health record and making it of real value.

By going monthly over the health records of children found to have physical

defects, in order to learn if corrections needed have been made, noting same on the cards; and when nothing has been done, talking with the child, urging the importance of attention to the doctor's findings, sending a note home to the parents—or, better still, seeing them personally. Thus aiding in the follow-up work and securing as soon as possible a clean bill of health for every pupil; 100 per cent health for her class should be the teacher's goal.

By knowing of the hospitals in her vicinity which are extending relief to financially handicapped children, communicating with the district superintendent or the medical inspection bureau for further information relative to the same.

By knowing the health officer of the town or district and cooperating closely with him in case of contagious diseases.

By becoming familiar with the various health agencies in the locality and working harmoniously with them.

By working in close cooperation with the district nurse, if there be one, continuing the monthly follow-up of children having physical defects, and so supplementing the home visits of the nurse.

By knowing, if possible, the parents of every child, assuring them of personal interest in their child and of the desire to work with them in every possible way.

French Museums Offer Busts of Great Americans

Exact replicas in plaster or bronze of busts of Washington, Franklin, La Fayette, and John Paul Jones, originally modeled by the famous French sculptor, Jean Antoine Houdon, are offered to American schools and institutions by the National Museums of France. Houdon came to the United States at the invitation of the American Congress for the purpose of making a statue of Washington. He became acquainted with many of the leading men of the country and sincerely admired them.

The originals of the busts of Washington and Franklin from which it is now proposed to make casts are in the Louvre; the bust of La Fayette is in the Chateau of Versailles, and that of John Paul Jones is in the Pennsylvania Academy, Philadelphia. The casts were executed in the ateliers of the National Museums by expert artists, either in plaster patiné

as the originals or in bronze mounted on marble pedestals. Circulars describing the busts and the conditions under which they are obtainable may be had of A. Gaulin, American Consul General, Paris, France.

Early European Associations of Teachers

On the occasion of the establishment of the new international organization of European teachers it was stated that the first teachers' association was established in France in 1833; in Bohemia in 1840; in Holland in 1844. The National Union of Teachers was established in England in 1870; Deutscher Lehrerverein in Germany in 1871; Bond van Onderwijzers in Holland in 1874; Zemský ústřední spolek učitelských jednot in Bohemia in 1880; Ústřední spolek učitelských jednot in Moravia in 1883; Fédération des Amicales d'Instituteurs in France in 1901.—*Emanuel V. Lippert.*

Comprehensive Survey of Land-Grant Colleges is Inaugurated

Conception of Undertaking Originated in Association of Land-Grant Colleges and Universities. To be Directed by Bureau of Education upon Invitation of Executive Committee and with Approval of President, of Secretary of Interior, and of Secretary of Agriculture. Congress also Approved and Appropriated \$117,000. Work Fully Organized and Already Under Way

By JNO. J. TIGERT, *United States Commissioner of Education*

THE Bureau of Education, Department of the Interior, is inaugurating a comprehensive survey of the work and activities of all the land-grant colleges in the United States and Territories. A study of the extent and character of this survey has never been undertaken by the bureau or any other agency. The conception of this undertaking did not originate in the Bureau of Education or the Federal Government. The impetus came from the institutions involved. The presidents of the land-grant colleges have been discussing the possibility for such a study for some years. After a careful consideration of the possible agencies for making the study, the heads of the land-grant colleges, through their official organization, the Association of Land-Grant Colleges and Universities, formally broached the matter of securing the cooperation of the Bureau of Education early in the spring of 1926. Through its executive committee, the association invited the cooperation and suggestions of the Bureau of Education, upon the advice of the Secretary of Agriculture.

Bureau of Education Will Direct Work

On April 22, 1926, the Commissioner of Education wrote Dr. A. F. Woods, then President of the University of Maryland and chairman of the executive committee of the Association of Land-Grant Colleges and Universities, that the Bureau of Education "would not care to enter into any arrangement to participate in such a survey except upon the basis that the Bureau of Education be in charge and direct the work. The importance of the task, the conflicting factors involved, and the necessity that the survey agency be free from any possibility of the charge of undue interest, make this an essential consideration."

On May 21, 1926, a formal invitation was received through Doctor Woods, acting on behalf of the executive committee of the Land-Grant College Association, upon the conditions suggested by the Bureau of Education. In his letter, Doctor Woods stated "The time has come when the colleges, themselves,

feel that there should be a national study of these agencies, with a view to determining how well they are fulfilling the purposes for which they were established and what changes or modifications, if any, are necessary in order to enable them to more effectively meet the new situations that are arising. We feel that such a study is a national problem, having to do with the work in all of the States, and that the investigation should, therefore, be headed by a national agency, and the natural agency for the study is the Bureau of Education.

"I have taken the matter up with the members of the executive committee and I am now, on behalf of that committee, officially requesting you to make provision for such a study.

"I can assure you that the executive committee, as well as the colleges themselves, will give every possible cooperation in this study and I am certain from it will result policies that will be of great value in the future development of these colleges in their relationship to our agricultural and industrial life."

Upon receipt of this communication, the Commissioner of Education discussed the matter with the Secretary of the Interior, who immediately gave his approval to the project. On May 25, 1926, the Commissioner of Education formally accepted the invitation of the Land-Grant College Association to undertake the study of the land-grant colleges.

Secretary Approved Acceptance of Invitation

In his letter to President Woods, the Commissioner of Education stated: "I have discussed with the Secretary of the Interior the invitation extended by your letter of May 21, 1926, in behalf of the Land-Grant College Association. It is with his hearty approval that I accept this invitation to undertake to provide for a general survey of the land-grant colleges by the United States Bureau of Education."

The Secretary of the Interior, Hubert Work, presented the matter to President Coolidge. The President gave his approval and authorized the Director of the Bureau of the Budget to include an item

for the study in the estimates for the fiscal year beginning July 1, 1927.

When the project was submitted to the Congress during the hearings on the appropriations for the Bureau of Education, Department of the Interior, Congress gave assent immediately, with the result that an item of \$117,000 was included in the appropriation to enable the Secretary of the Interior, through the Bureau of Education, "to make a study of the organization, administration, and work of the land-grant institutions," \$61,000 being available in the fiscal year beginning July 1, 1927, with the provision that specialists and experts for this investigation might be employed at rates to be fixed by the Secretary of the Interior to correspond to those established by the classification act of 1923.

With the funds thus provided, and with the enthusiastic approval of the President, the Congress, and the Secretaries of the Interior and Agriculture Departments, the Bureau of Education entered upon the work of organizing the survey.

Establishment of the Land-Grant Colleges

Before entering upon a description of the plan of the Bureau of Education for this study it might be well to recall the circumstances of the establishment of the land-grant institutions. It is well known that these institutions originated indirectly as a result of Federal policy in education, which is set forth by President Coolidge in a recent address delivered at the South Dakota State College, one of the land-grant institutions.

In this address the President said: "During the administration of President Buchanan the Congress had passed a bill providing for a grant of land in the several States to establish educational institutions in agriculture and the mechanic arts. This bill had been vetoed. It is said that Jonathan B. Turner was the author of this measure, and that, before he was nominated, Lincoln had told him that if he were chosen President the proposal would have his approval. Representative Morrill, of Vermont, later Senator for many years, fathered the bill in the Congress and it bears his name. It was passed and signed by President

Lincoln on July 2, 1862. Under its provisions 30,000 acres of public land for each of their Senators and Representatives in the Congress were given to each State to be used for the support of a college of agriculture and mechanic arts. Under the terms of this law the States have established these institutions, which in the past 50 years have played such an important part in the agricultural life of our country."

Senator Morrill Overcame Strong Opposition

Too much credit can not be given to Senator Morrill for the vision and statesmanship which he displayed in fathering this act amid a storm of opposition and ridicule. The Legislature of Michigan had authorized the establishment of a State agricultural college in 1857, but agricultural education was not at that time recognized as a legitimate part of the program of higher education. The old-established universities and colleges looked with suspicion upon this new principle in the realm of higher education. "Waste of public lands and of private fortunes," "another illustration of the folly of attempting to make a purse out of a sow's ear," "a doctrinaire experiment that would end in failure," were some of the gibes poked at Senator Morrill's plan. Senator Morrill, undaunted by these criticisms, supported his measure with great ability and more than ordinary eloquence. He made the following fervent plea for the passage of the act: "Pass this bill and we shall have done something to enable the farmer to raise two blades of grass instead of one; something for every owner of land; something for all who desire to own land; something for cheap scientific education; something for every man who loves intelligence and not ignorance; something to induce the farmer's sons and daughters to settle and cluster around the old homestead; something to remove the last vestige of pauperism from our land; something for peace, good order, and the better support of Christian churches and common schools; something to enable sterile railroads to pay dividends; something to enable the people to bear the enormous expenditures of the National Government; something to prevent the dispersion of our population, and to concentrate it around the best lands of our country—places hallowed by church spires and mellowed by all the influences of time—where the consumer will be placed at the door of the producer; something to increase the loveliness of the American landscape."

Growth of the Land-Grant Colleges

The Morrill Act of 1862 provided that "the income from these lands should constitute a Federal fund, the capital of

which shall be inviolably appropriated by each State which may take and claim the benefits of this act to the endowment, support, and maintenance of at least one college where the leading objects shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts in such manner as the legislatures of the States may respectively prescribe, in order to permit the liberal and practical education of the industrial classes in the several pursuits and professions of life."

As a result of the original act, fathered by Senator Morrill and signed by President Lincoln, together with amendments and supplementary acts, there have developed 69 institutions in the United States and its Territories. There exists to-day at least one such institution in every State in the Union and one each in Porto Rico, Hawaii, and Alaska. Massachusetts has two such institutions, and in 17 of the Southern States there is an additional institution provided exclusively for colored students. In approximately one-half of the States the land-grant college is an integral part of the State university, located in the same city or town, but 24 of the land-grant institutions are set up in separation from the State university and under different administration, or exist in States where there is no State university. These separated institutions are styled in various ways, but usually pass under such titles as "State agricultural college," "College of agriculture and mechanic arts," "Institute of technology," and the like.

Institutions Have Grown Prodigiously

These several institutions developed very rapidly after the passage of the Morrill Act, and have grown prodigiously. It is probably fair to say that they have exceeded even the rosy hopes entertained by Senator Morrill.

Traditionally, higher education had no relation to the development of agriculture or other practical arts. The primary purpose of the first institutions of higher learning in this country was to serve the church. All the colonial colleges except one were denominational, and anywhere from one-third to one-half of the students graduating from Harvard, Princeton, Yale, Brown, and similar institutions went into the ministry. Previous to the passage of the Morrill Act, both Michigan and Maryland had undertaken to establish agricultural colleges, but agriculture was not yet recognized as a science nor as a legitimate phase of the college curriculum.

The passage of the Morrill Act coincided with the beginnings of the applica-

tion of science to industry, which has so enormously multiplied since that day. Perhaps it is this coincidence with the inauguration of the modern scientific era which accounts in a large measure for the rapid strides that we have made. Nevertheless, students and funds have come with ever increasing volume to the doors of these institutions dedicated to the development of agriculture and the mechanic arts. Tens of thousands of dollars became hundreds of thousands, and hundreds of thousands became millions.

In 1926, there were approximately 6 times as many students in the land-grant colleges as there were in 1905; receipts were 11 times as great, and the value of the property had increased five-fold. The growth of the land-grant colleges can be seen at a glance from the following data collected by the Bureau of Education:

Institutions attended primarily or exclusively by white students

	1905	1926
Instructors.....	4,103	22,245
Students.....	48,593	314,785
Degrees conferred.....	4,067	24,112
Libraries (volumes).....	1,630,153	6,622,637
Receipts.....	\$11,766,984	\$126,089,148
Value of property.....	\$77,489,937	\$397,110,979

Institutions exclusively for negroes

	1905	1926
Instructors.....	370	1,115
Students.....	6,361	13,259
Degrees conferred.....	0	140
Libraries (volumes).....	39,961	55,199
Receipts.....	\$574,021	\$3,130,353
Value of property.....	\$4,007,506	\$8,855,134

The Bureau of Education did not collect figures on expenditures until 1925. In 1926 the institutions primarily or exclusively attended by whites expended \$123,461,679, and the institutions attended exclusively by negroes expended \$2,898,977.

Half the Cost Paid by States

At the present time approximately 50 per cent of the revenues enjoyed by the land-grant colleges is derived from the States, and something over 10 per cent comes from the Federal Government. Other sources of income are tuition and fees, private gifts, etc. Since the passage of the Purnell Act, which gives additional money to the land-grant colleges, over \$14,000,000 goes into these institutions either directly or indirectly from the Federal Treasury. This includes money expended in extension activities as well as resident work.

The material development of the United States, particularly in the West, has resulted in large measure from the activi-

ties of the land-grant colleges. Previous to their establishment farmers knew nothing of the scientific analyses of soils. The fertilization of crops by chemical formulae was not practiced, nor did men know how to destroy noxious diseases by the artificial culture of serum and toxins. Much of the industrial progress of the United States has resulted from the research and engineering science emanating from the schools of the mechanic arts.

Thus, agriculture and manufacturing have been stimulated and propagated through these institutions. Quoting again from the recent address made by President Coolidge at the South Dakota State College, the President said:

Productivity Has Been Greatly Stimulated

"It has been under their (agricultural colleges) inspiration that the amount of production for each person employed has been so highly increased and the productivity of the soil so greatly stimulated. They created a vast agricultural empire lying between the Alleghenies and the Rockies, which has furnished an increasing food supply to meet the demands of our growing population."

The President goes on to express the thought that, indirectly, the land-grant institutions were a decisive factor in winning the World War, as the European nations were dependent to a considerable degree upon this country for foodstuffs made possible through scientific agriculture, and he adds that these institutions have been spiritual values to American civilization which equal or surpass the economic results.

Plan and Organization of Study

Details have not been completely worked out nor is space available here to give a comprehensive outline regarding the plan of the survey. Three general principles have been set up by the Bureau of Education as a basis for the work:

(1) The Bureau of Education regards the survey as a national study of the accomplishments, the present status, and the future objectives of the land-grant type of education and not a collection of surveys of individual institutions.

(2) The bureau feels that the success of the survey depends largely upon the impartiality and thoroughness with which it may discover facts and make constructive recommendations. Therefore, it will be the policy of the bureau to maintain entire control of the work and assume responsibility for the report. At the same time, it is planned to utilize to the fullest extent all of these groups, agencies, and individuals who are now organized to carry on and promote the interests of special aspects of land-grant college education. The leaders and the rank and file of land-grant college education will be

freely consulted and given opportunity to express opinions. Close contact will be maintained with the services in the Department of Agriculture which articulate with the land-grant colleges. The personnel for the survey staff outside the bureau's permanent staff will be obtained in large part from those engaged in administration and instruction in the land-grant colleges.

(3) In the broadest sense, the functions of the land-grant colleges, as defined by the Morrill Act and as developed during their past history, are regarded by the Bureau of Education to be public and democratic in nature, with ideals, practical purposes, and objectives which are worthy of full recognition in the field of higher education.

To accomplish these purposes, it is proposed to employ outside specialists who will work with the specialists in the Bureau of Education. All the work will be done under the direction of the Commissioner of Education. Dr. Arthur J. Klein, chief of the division of higher education, will be immediately in charge and director of the survey.

General Advisory Committee Formed

As already stated, the regular specialists of the staff of the Bureau of Education will be supplemented for the purposes of this study by experts drawn from all parts of the country, particularly from the personnel now engaged at the land-grant colleges. A general advisory committee has been formed, with representatives from the major interests involved in this study. The Hon. Hubert Work, Secretary of the Interior, will act as chairman of the advisory committee. The Hon. W. M. Jardine, Secretary of Agriculture, will represent the Department of Agriculture and agricultural interests on the committee. Dr. Raymond A. Pearson, president of the University of Maryland and chairman of the executive committee of the Association of Land-Grant Colleges and Universities, has been chosen by the association to represent it on this committee. In addition, the Bureau of Education has designated Dr. Charles A. Lory, president of the Colorado Agricultural College, as a member representing the separated land-grant college. Dr. Lotus D. Coffman, president of the University of Minnesota, has been designated as a representative of that type of institution which is integrated with the State university. President R. S. Wilkinson, of the State Agricultural and Mechanical College of South Carolina, has been designated by the conference of presidents of negro land-grant colleges to represent those institutions set up exclusively for negroes. Miss Martha Van Rensselaer, director of home economics of Cornell University, has been designated as

a member of the advisory committee to represent home economics and the education of women. Dr. Samuel W. Stratton, president of the Massachusetts Institute of Technology, has been placed upon the committee as a representative of technical engineering. Dr. Francis G. Blair, State superintendent of public instruction of Illinois and past president of the National Education Association, has been designated as a representative of public education. This constitutes the general advisory committee. One or two additional members may be added to this committee.

Liaison Committees Have Been Designated

The executive committee of the Association of Land-Grant Colleges and Universities will act as a liaison between the bureau and the association. In addition, each section and subsection of the association has been asked to designate a committee or subcommittee to act as a medium of contact between the survey and the group of their special interest. The American Veterinary Medical Association has been asked to designate a committee to act as a liaison between the survey and those who are interested in the professional training of veterinarians. It has also been asked to appoint a committee to present the views of the veterinarians with reference to the veterinarian training in the regular agricultural course. The association of governing boards of State universities and allied institutions will be asked to designate a committee for contact with the survey with reference to methods of controlling and financing land-grant colleges. Further contacts of this kind will be established as occasion arises. Among others it is hoped to secure the cooperation of the editors of the agricultural press.

Director Has Visited All the Institutions

Doctor Klein, director of the survey, has already made a preliminary visit to all the land-grant institutions in the continental United States, with the exception of those exclusively designed for negroes. The latter have been visited by other members of the bureau staff. These visits have already afforded personal interviews by Doctor Klein, lasting from one to three hours, with more than 400 presidents, directors, and deans.

An extensive amount of material already available with reference to the land-grant colleges has been collected in the Bureau of Education and is now being digested preliminary to the collection of further data.

All the lines of activity and interest and the relationships of the land-grant colleges will be covered by the survey. This means that the organization of the procedure must be upon functional lines.

The activities and interests which have now been listed for study are included

under the following topical heads. This statement is tentative. Additions and changes will undoubtedly be made in the subjects of study: Organization and administration; finances; personnel problems (staff); student relation and welfare; curricula; libraries; agriculture; engineering; home economics and education for women; arts and sciences; teacher training; veterinary medicine; extension, home demonstration, and club work; experiment station and research; improvement of teaching; social and economic relationships; military training; physical plant; forestry.

Detailed Information Procured by Questionnaires

Obviously, it would not be practicable to have a specialist in each of the lines of inquiry visit every institution, as the cost would be prohibitive. It is equally obvious that only specialists, in consultation with their colleagues, can properly plan the outlines of the inquiry in each field of activity. The procedure which has been adopted by the survey, therefore, provides for the employment of persons selected from each of the fields of inquiry, for the purpose of making a preliminary plan and preparing a detailed questionnaire for obtaining the information required in each special field.

These questionnaires will then be assembled, coordinated, and consolidated. Questionnaires will first be filled out so far as practicable by members of the survey staff, with information available in the Washington office; later they will make personal visits to the institutions. The president of each institution will be asked to appoint a committee to cooperate with the survey staff in making suggestions and in completing the questionnaires. The questionnaires will be left for the consideration of these committees and will be returned by them to Washington.

A brief school will be held for the benefit of those members of the staff who are going to the field, in order to give the specialists who have planned the questionnaires an opportunity to explain them and indicate the lines of further inquiry.

Results of Survey

After the collection of data and material through the questionnaires and field work, tentative reports will be compiled in each of the fields of inquiry by specialists. In some instances it may be advisable, after the tentative reports are ready, to hold further conferences with experts for the purpose of further suggestion and criticism. Finally, two reports will be made, one of a technical nature and one written in a more popular style which will contain a summary of the entire survey and will be easily intelligible to the layman.

It is now 65 years since the passage of the Morrill Act, which fostered the land-

grant colleges. During all these years these institutions have been carrying on, growing and expanding, and making increasing contributions to the national life. The leaders in these institutions have arrived at a point where they believe that some appraisal should be made of the work and that their future activities may be charted on more accurate information than is now available. Many problems have arisen, for the solution of which accurate information is not available. Problems relating to organization, financing, curriculum reconstruction, relationship to other institutions, particularly articulation with the program of other State institutions, and similar matters need to be carefully studied.

The agricultural industry of the Nation has been facing a difficult situation. Plans for Federal relief are being discussed. More than a half century ago the Federal Government inaugurated a policy of stimulating agricultural industry and science through the bounties to the land-grant colleges. In the present situation the effects of this policy should be carefully evaluated. No comprehensive program of Federal relief in the field of agriculture can ignore the steps already taken and the policies which are now so deeply rooted in the national life.



"Visits" and "Journeys" for London Pupils

An educational visit is an excursion, approved by the inspector, during a school session. The places visited are famous public buildings like the Tower, St. Paul's Cathedral, Westminster Abbey; gardens like those at Kew and Hampton Court; the national art galleries and museums, the Zoological Gardens; and docks and factories where industrial and commercial processes are carried on. The whole cost of these visits is borne by the council; limits are fixed for admission and traveling expenses. Visits to Shakespearean performances are allowed, and special performances are arranged for school children at which the entire seating accommodation of certain theaters is reserved.

A school journey is a visit for a week or a fortnight by parties of school children under charge of two or more teachers to a place of geographical, historical, or economic interest. The first school journeys were made in 1896. In that year a Liverpool and a London school, each unknown to the other, organized its first school journey. Originally intended as a means of developing the social experiences of children in elementary schools, it has now become an extramural system of education for many schools. It has

spread from the elementary school to central, day continuation, trade and secondary schools, and even to schools for the mentally defective and to reformatory and industrial schools. In a modified form it has been adopted in evening institutes to suit adolescent and adult requirements. Fostered by the School Journey Association, a body almost exclusively composed of teachers, and by local support at places visited, the school itineraries now include continental towns and countries and English manufacturing areas as well as country and seaside resorts.

Substantial grants in aid are given by the London County Council, and indirectly by the board of education, to schools participating. The balance of the cost is met by parental contributions, school funds, and private support. School journey camps have been organized and special traveling and other accommodation facilities secured. The immediate aim of the school journey is to illustrate school lessons in literature, history, civics or geography; to enable the children to do field work in nature study, map reading, drawing, and other practical out-of-doors subjects. But, undoubtedly, its ultimate achievements are greater than its immediate aims; it makes the parent an eager ally of the school in social and educational activities, and it teaches children those amenities of thought and conduct, both amongst themselves and amongst strangers, which spring from an experienced and disciplined mind.—*"The London Education Service," 1927, published by The Education Committee, London County Council.*



Recent Publications of the Bureau of Education

The following publications have been issued recently by the Bureau of Education of the Department of the Interior. Orders for them should be sent to the Superintendent of Documents, Government Printing Office, Washington, D. C., accompanied by the price indicated:

Bibliography of studies in secondary education. Eustace E. Windes. (Bulletin, 1927, No. 27.) 10 cents.

Nursery-kindergarten-primary education in 1924-1926. Mary Dabney Davis. (Bulletin, 1927, No. 28.) 10 cents.

Industrial education. Maris M. Proffitt. (Bulletin, 1927, No. 29.) 5 cents.

Higher education. Arthur J. Klein. (Bulletin, 1927, No. 34.) 10 cents.

Music in platoon schools. Will Earhart. (City school leaflet, No. 27.) 5 cents.

Some publications in the field of kindergarten-primary education. Mary Dabney Davis. (City school leaflet, No. 28.) 5 cents.—*Mary S. Phillips.*

Dairy Project for Intermediate Schools

By FLORENCE C. FOX

Assistant Specialist, Bureau of Education

MANY SCHOOLS in the United States are including in their fall and winter programs the study of the dairy as a project that is close to the child's interest. The dairy project offers a wide field of study through lessons in modern methods of dairying, the construction of silos and dairy barns, of motor churns, cream separators, and cheese presses. The sterilization of dairy utensils and the process of milk Pasteurization as lessons in chemistry, bear the closest relation to the child's health and well-being. These may well be woven into our plans for projects as we look for subjects in science that hold an absorbing interest for the child.

A background of facts on this subject is essential if the teacher would meet successfully all the problems that arise in the daily classroom recitation. Some of these problems are discussed in this article but are presented in the form of reading lessons to obviate the necessity for adaptation of source material to the children by teachers who have not such material at hand and have also little time for the research needed in preparing the lessons. As given here they are designed for pupils in the intermediate grades. Should the primary teacher desire to use them as reading lessons she will find little difficulty in adapting them to the children in the lower grades.

LESSON I

Cows of Other Days

A long time ago when cows were wild they lived in the forest. They loved to eat the long grass that grew there, and to drink the cool water of the brooks that rippled by on their way to the river.

Here they made a home for their calves and taught them to take care of themselves while their mothers were away getting food.

Bears and wolves lived in the forest and the little calves were very helpless. The mother cow made a bed of red and yellow leaves which was just the color of her calf. Then she taught it to lie very quietly when it heard any sound in the bushes. Hiding it safely among the leaves, she went away to the forest to feed. If a wolf came near the bed the little calf lay so still that the wolf did not know it was there.

All day the mother was away feeding, gathering in the long juicy stems of the grasses with her tongue, and breaking them off with her teeth.

She swallowed her food quickly, not stopping to chew it. Then, at night, back she came to her baby to feed and to pet it, to lie by its side, and to chew the food she had eaten during the day.

In the morning she went out again with other mothers and fathers of the

herd to feed in the wide open places where the grass grew long and tender.

One of the herd was the leader, and the others followed meekly wherever he chose to go. They loved to wander by the streams of water and to stand in the marshy places along the banks. They stood for hours in the shallow water, chewing their cuds, and switching the flies with their long tails.

They could walk easily in the soft wet soil along the streams, for the split in their hoofs helped them to draw their feet out of the mud.

Sometimes a pack of wolves followed the herd. When the cows heard them coming they made ready to receive them. They formed themselves into a circle with their heads out, and waited. In the center of the circle were the weak cows and younger ones. On the outside of the circle stood the big bulls and the strongest cows with their heads lowered and their long sharp horns waiting for the attack.

On came the wolves, barking and yelping, and the bristling horns received them. The wolves were tossed and pierced by the horns and trampled with the hoofs of the angry herd. They were glad to slink back into the forest.

Silent reading.—Take a walk to some pasture where a cow is feeding. Watch her eat grass. Notice her hoofs and watch her step over the soft ground. Watch her chew her cud. Notice the horns of a bull, how strong they are, and how heavy and strong his head is.

How the Cow Came to America

In Plymouth, during the first year of the settlement, there was no milk to be



The American bison is the cow's cousin

had. There were no cows in this new land when the white men came over from the old country.

Where there is no milk, there is no cream and butter, and the boys and girls of the Plymouth colony often longed for the good old days in England. They missed more than anything else the mugs of sweet milk and the golden butter

The butter came at last, and word went round the village. Busy housewives came with their husbands to see the new butter. It tasted all the sweeter because they had waited so long for it.

And often, after this, when there was plenty of milk and butter and cream and even cheese in the village, some one would say: "No butter will ever taste so good

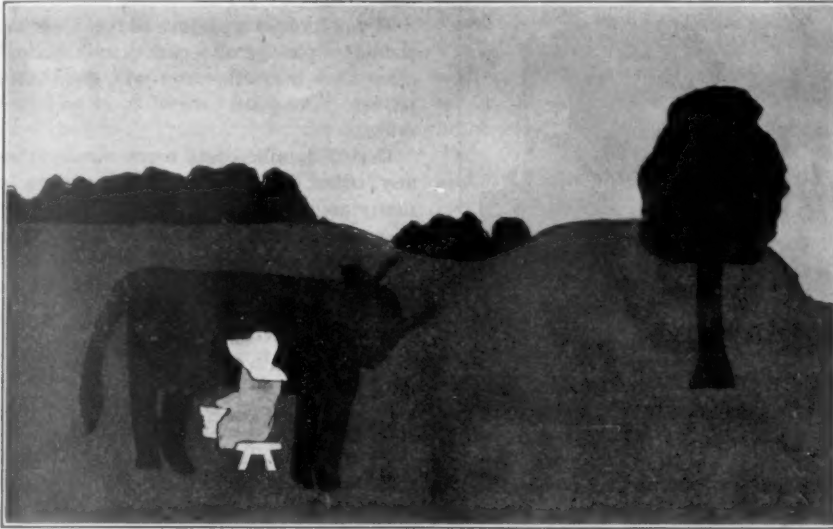
say, there are only four breeds of dairy cows which are very good. Some of these breeds are noted for their rich milk which is good for butter making. Some breeds give more milk than others. If the farmer lives near a large city where there is a good market for milk he likes a breed of cows that are good milkers. If he wants to sell cream to the creamery or to make butter on his own farm he chooses a breed of cows whose milk is rich in butterfat.

The dairy farmer likes to own stock that is "registered." That means that each cow's name is in the book that contains the names of all the cows of that family. Then the number of pounds of milk that she gives each year is recorded, and the number of pounds of butterfat in her milk. If she gives more than other cows she becomes a champion cow in her family and her name becomes known to all the dairymen in the country. The cow that gives more milk than any other cow in the world becomes the world champion.

The Model Milking Room

A model milking house on a dairy farm in New Jersey doesn't look much like the stables where the barnyard cow is milked. The floor and walls are of cement. All the woodwork is painted white and the room is light and airy.

The pipes which run through the room are full of fresh water which comes from the well by the windmill. The water is pumped up from the deep well and is stored in a tank for use on the farm. Long rubber tubes are fastened to the pipes and before the cows are brought into the room to be milked the room is washed from the top to the floor. Each window is rinsed with the fresh water, the



Children enjoy making posters from colored paper

that were served with every meal in their old home.

So they dipped their bread in the meat gravy which their mothers made to take the place of butter. For the woods were full of game, and wild turkeys and venison were common dishes in the new settlement. But nothing can quite take the place of a glass of milk and a slice of bread and butter.

It was a great day, as you can see, when the good ship *Charity* brought over to Plymouth a load of cattle from England. Three cows and a bull came wading in to the shore from the vessel, and all the people hurried down to see the new cattle.

But there was no milk for the children to drink, even then. It was saved for the old people who could not eat meat and for the sick who needed it. It was seven long months before any cream could be spared for butter. Other cows had been added to the herd, and there were 17 head of cattle before Mistress Higgins made the first butter.

That was a day long to be remembered. John Alden had made Mistress Higgins a fine new churn, and she had waited long to use it. Now she rolled it out on her doorstep and began to churn the cream that she had saved from the milkings. She made a pretty picture in her white kerchief and cap, and people passing called to know how the butter was coming. Up and down the dasher flew, and at last the yellow flakes began to show around the handle of the dasher.

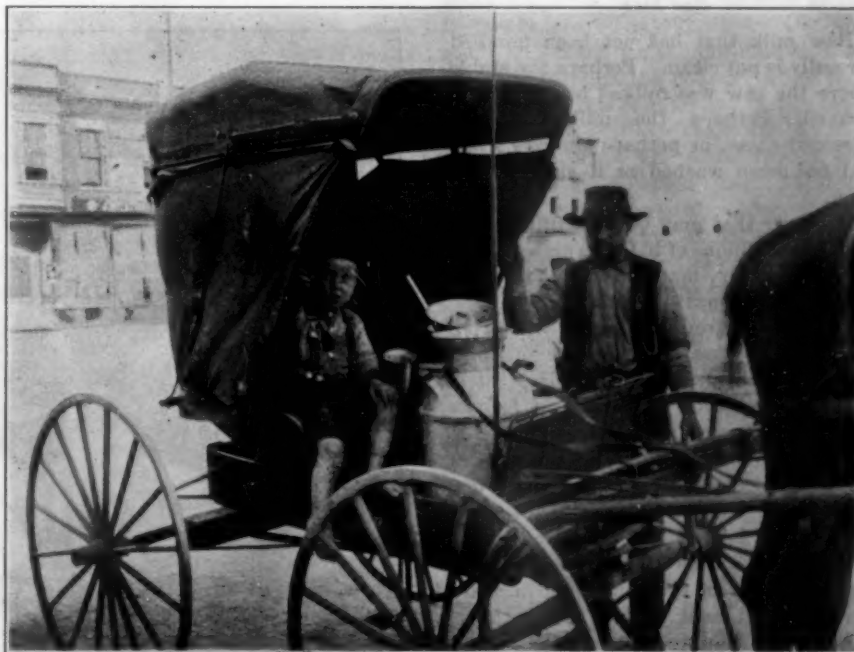
as Mistress Higgins's butter on the first churning day."

LESSON II

The Dairy Farm

On a dairy farm the cows live together in a herd. On the cover is a picture of a herd of cows on a dairy farm in New Jersey.

The dairy farmer likes to keep one family of cows on his farm. Strange to



Milk was sold from open cans before we knew of germans

ceiling and the walls are washed down and then the floor is scrubbed until every part of it is as clean as water can make it.

Then the cows are brushed and combed, their bags are washed, and they are led into their places to be milked.

in the buggy. Where milk is exposed to the open air the germs will find their way into it. They are carried in the dust of the street and they lurk in the dark corners of stables and barns that are not flooded with fresh air and sunshine.

sterilized with steam after they are used.

This milk is called certified milk because the dairyman signs a contract to keep his milk clean. He has a certificate which the State board of health has given him. They look at his milk through a glass that magnifies and if there are no bad germs in it they give him a paper which says that his milk is as clean as it can be made.

If you look at a picture of raw milk and then at a picture of certified milk under a glass that magnifies you will see that it pays to take good care of cows and their milk.

Certified milk costs more money than any other kind of milk. It takes so many people to take care of the cows and to wash and brush them and keep them clean. It takes so much time to wash the milking house and the cooling house and to sterilize all the cans, pails, and cloths that are used in a dairy that the dairyman has to charge a big price for his milk.

Pasteurized Milk

Pasteurized milk is not raw milk and it may not be certified milk, but it is good to drink and to use in cooking. It has been heated until all the germs in it have been killed. There is a story about this milk and why it is called "Pasteurized."

Doctor Pasteur lived in the city of Paris in France, and took care of the sick people there. One summer he was called to see a sick baby, and he asked the mother what food she had given her baby. The mother said, "Milk, nothing but milk." Soon the doctor was called to see another sick baby, and then another, and many more, and in every house he asked the same question: "What has this baby eaten?" and the mothers all said: "Nothing but milk."

The milkers are dressed in white duck which is easily washed and kept clean. Their hands are clean and their hair is covered with a white cap.

Their pails have been scalded and are as clean as hot steam can make them. The pails have a tight fitting cover so that no dirt can get into the milk when it is carried to the milk house. Do you think that this milk will be clean and without germs? Would you like to see a picture of a drop of milk that came from this milking house? It is called certified milk because it is the cleanest milk that is sold by the dairymen of this country.

Raw Milk

Raw milk that has not been handled carefully is not clean. Perhaps the stable where the cow was milked had not been cleaned. Perhaps the milkers' hands were not clean, or perhaps the cow's bag had not been washed as it should have been.

However that may be, it is full of dirt. There are millions of little germs in it, and of course, many, many times more germs in a pint or a quart of this milk.

These little groups of germs will make us sick if we are not strong enough to overcome them. Many babies, little children, and even mothers and fathers may die every year from these germs.

If the cows and their milking places are kept clean there will be very few germs in the milk. They do not grow where there is fresh air and clean water and where the cans and pans and straining cloths that are used about the milk are sterilized and kept clean.

A drop of impure raw milk looks like the milk that is being sold from the cans

If we keep our milk tightly covered these germs will find it harder to get in and spoil it for drinking and cooking.

Certified Milk

The dairyman who sells certified milk is very careful to keep it clean and to see that no dirt gets into it.

He keeps the cow's stables where they sleep clean by washing them every morning with clean water when the cows have gone out to the pasture. He keeps the cooling room clean by washing it as he washes the milking house.

All the pails, the cans, and the cloth strainers which this dairyman uses are



Milk is now carried to the city in closed cans



The reindeer is another of the cow's cousins

The doctor asked to see some of the milk. He took it to his office and looked at it through a glass that magnifies. He saw all the germs in it and knew what made the babies sick.

Now the doctor went to work to make the milk safe and to find some way to kill the germs in it. He heated it over a fire until it was very hot and then cooled it quickly. This made the milk good and sweet. That is the reason why this kind of milk is called "Pasteurized milk." After that Pasteurized milk was used everywhere. It is a law now in many cities that only Pasteurized milk can be sold to customers and it must be sold within two days after it has been Pasteurized.

Pasteurizing Milk

There are many large Pasteurizing plants in our large cities. Large vats are on the upper floor of the room, and are filled with hot milk. The milk runs down from the upper floor through the pipes to the vats on the second floor and from here to the first floor into the machines that fill the bottles. As fast as a dozen bottles are filled and covered, the men pack them into boxes and send them to the cold-storage room, where they are ready to be hauled away.

The milk is kept as cool here as in the cooling room on the dairy farm. The air in this room is about 38 degrees both winter and summer.

The pipes in the top of the cooling room are filled with brine or salty water. These pipes turn so cold that they cool the air in the room and the milk is kept at just the right temperature.

Selling Milk—In Days Gone By

This is a picture of the selling of milk in America in the old days before we bottled our milk and pasteurized it. Even the best of milk would be spoiled if it were sold in this way. No pains are taken to keep the milk clean. The driving reins are tied around one can, and the handle of the dipper is sticking out of the other. Both covers are partly off the cans of milk. The dust of the street blows into the milk. The horse's tail switches the dirt over and into the cans. Even the driver and the boy in the buggy look untidy.

You can easily picture the barn where this milk came from. The stable where the cows are milked has not been cleaned. The cows have not been brushed and their bags have not been washed before milking. The pails and cans are not clean. They are sour because they have not been scalded and the germs in them have not been killed by sterilizing the pans and cans and the straining cloths. Many changes have been made since this man peddled milk in open cans. The boards of health

have looked at this milk and found it full of germs that make people sick. Laws have been passed that milk can not be sold in this way. This has led to the selling of certified milk and pasteurized milk in all our large cities.

Now the milk from the dairy farm is sent to the city in cans loaded onto trucks. After the milk is strained from the pail into the can it is not opened until it reaches the pasteurizing plant in the city. The cans are carried to the railway station and are loaded into refrigerator cars where the temperature is kept at about 38 degrees so the milk will not sour. Then it is sent to the pasteurizing plant and from there it is delivered to customers in the city.

Drinking Milk in School

Boys and girls are measured in school to see if they are growing as they should. Some children need a change of food and some need more food than they are getting. Milk is the best food for growing boys and girls that is known in the world to-day. It has in it the kinds of food that meat and vegetables and bread contain. Many schools serve a glass of milk every day to any child who wishes to drink it.

If you do not like the taste of milk try a little chocolate sirup in it. This is the way to make the sirup: Take two squares of chocolate and put half a cup of sugar and a half cup of water with it. Let it boil until it is like a sirup. When you want to drink a glass of milk and do not like the taste of it put a tablespoonful of chocolate sirup in it. You will like it very much and will want a second glass to drink.

LESSON III

The Cow's Cousin, The Reindeer

The Eskimos in Alaska own many herds of reindeer, and Mr. Anti is one of these Eskimos. There are hundreds of reindeer in Mr. Anti's herd and Ole, the herd boy, with the dogs, helps him to take care of them. For a reindeer herd is like a herd of cattle on the western plains; it must be watched day and night.

If it is summer the reindeer wander through the green valleys and eat the grass and moss and the young sprouts of the willows which grow by the streams. If it is winter they eat the moss that grows under the snow.

At night the herd stays quietly feeding or resting near the camp. The Eskimo herders take turns in watching the reindeer. In the winter, they use their sleeping bags. When a storm comes they crawl into their sleeping bags, pull them up over their heads, and lie down in the snow. Here they are snug and warm, for the snow cannot reach them nor the wind find its way through their warm covers.

Sometimes the wolves come at night and try to reach the deer. The dogs hear them and begin to bark. This frightens the herd and sometimes they start to run, and there is danger of a stampede of the whole herd, over the snow, through the dark night. The herders jump out of their bags and shoot at the wolves, who slink away. The dogs go after the stray reindeer and bring them back to the herd, and soon everything is quiet again.

Often, in the winter, a big snow storm comes up and the snow falls for three or four days until it gets so deep that the deer are nearly covered over with it. But they do not mind that. They wade through the snow and dig their way down to the moss with their front hoofs.

There are many hard wind storms in the reindeer country. The wind sweeps the snow off the hills and piles it in drifts in the valleys. Then the deer cannot be driven to their feeding grounds. They must eat what moss they can find on the hill tops.

The Cow's Cousin, the Bison

Long ago, when the wild cow lived in the forest, her cousin, the bison, lived on the plains in this country. They wandered over the open places much as the cow wandered through the forest.

Great herds of them, before man came to their land, moved together over their feeding grounds, eating through the day and at night marching to the river to drink. They were very fond of salt and took long journeys to their salt licks.

An old captain of the herd led them over the paths which other herds had trod for thousands of years. These trails which the bison made were worn for many centuries into paths as hard as our highways are to-day and were the first roads which the white men used in their journeys through the country when they first came to this country.

Only a few of these bison are left now in this country. The white hunter and the Indian have killed them for their valuable hides, out of which buffalo robes were made and leather goods were manufactured. Herd after herd have been wiped out by these careless hunters until no trace of them remains to-day on the western plains.

The Great Plains have been plowed and sown to wheat, and busy farmers reap and harvest grain on the land where once the bison lived.

A few bison have been saved as curiosities. You may sometimes see them in the public park or in the zoo of some large city. There they stand behind the wire fences which shut them in, all day chewing their cuds and dreaming, perhaps, of their old life, free and wild on the plains.

New Books in Education

By JOHN D. WOLCOTT
Librarian, Bureau of Education

DAVIS, CALVIN OLIN. Our evolving high-school curriculum. Yonkers-on-Hudson, N. Y., World book company [1927] ix, 301 p. tables, diagrs. 8°.

In view of the searching analysis to which the secondary-school curriculum is now being subjected, Professor Davis's book is designed to give a clearer understanding of what the present curriculum issues are and how they are being attacked. The necessary perspective is afforded by tracing the evolution of the curriculum from its origin, bringing out particularly the American developments of the past half century. The nature of youth is then discussed, with a summary of the outstanding conclusions which have been reached by investigators. The aims and objectives, the theories as to the function of the high school, comprise a group of problems brought out in detail. The educational values that inhere in the different school subjects are next examined. The final group of problems dealt with is concerned with the administrative aspects of the curriculum. Another feature is an extended compilation of data from many different curricula selected from typical communities.

DAVIS, GUY PRATT. What shall the public schools do for the feeble-minded? A plan for special-school training under public-school auspices. Cambridge, Harvard university press, 1927. xviii, 225 p. tables, diagrs., forms. 8°. (Harvard studies in education, pub. under the direction of the Graduate school of education, volume X).

Dr. Walter E. Fernald, who died in 1924, achieved great success in administering the Massachusetts School for the Feeble-minded at Waverley. This study applies Doctor Fernald's educational system of the feeble-minded to the training of mental defectives in the public schools. The book is suggestive for public-school administrators who are in doubt how to handle feeble-minded children among normal class groups.

FRIES, CHARLES CARPENTER. The teaching of the English language. New York, Thomas Nelson and sons, 1927. 3 p. l., 187 p. 12°.

The modern scientific view of language is interpreted in this book in a practical way for teachers. It presents not only a criticism of the older views and practices, but also offers the principles of a constructive program and defines the objective of such teaching. It does not offer a detailed program for the study of English, but aims primarily to provide guiding principles of teaching.

HILLEGAS, MILO B., ed. The classroom teacher. Chicago, The classroom teacher, inc. [1927] Vols. I-7, 10. 8 v. illus., tables, diagrs. 8°.

When completed, this work will comprise 12 volumes, which have been divided into three units. The first volume deals with professional subjects applicable to all grades, and is intended for use with any one of the three units. Volumes 2, 3, 4, and 5 are concerned with the work of the first three grades. Volumes 6 to 9, inclusive, deal with the work for grades 4, 5, and 6. Volumes 10 to 12, inclusive, cover the work for grades 7, 8, and 9, or the junior high school. The sections on special topics in these volumes are composed by authorities in their respective subjects, in such a way as to give teachers

practical help both in professionalized subject matter and in method. Dr. Milo B. Hillegas is editor in chief, assisted by Drs. Thomas B. Briggs, W. C. Bagley, and others.

KELLEY, TRUMAN LEE. Interpretation of educational measurements. Yonkers-on-Hudson, N. Y., World book company [1927] xiii, 363 p. tables, diagrs. 8°. (Measurement and adjustment series, ed. by L. M. Terman)

The purpose of this book is to offer certain guides in the interpretation of test scores and to reveal the errors involved—all with a view to a saner, a more widespread, and at the same time a more penetrating use of such measures. The most radical departures from the treatments of earlier texts dealing with mental measurements are, first, a study of achievement and intelligence measures in their mutual relationships rather than separately; second, an emphasis upon measures of reliability and an attempt to determine the trustworthiness of all conclusions reached; and third, the publication of the ratings for general excellence for purposes of individual measurement and diagnoses of all the well-known intelligence and educational tests, by selected judges.

KNOX, ROSE B. School activities and equipment; a guide to materials and equipment for elementary schools. Boston, New York [etc.], Houghton Mifflin company [1927] xxx, 386 p. illus., plates. 12°.

In this book, the author has summarized the results of her own extensive experience, and the experiences also of many other teachers, in the selection, use, and testing of many educative activities and materials. Here is a compilation which attempts to select and organize some of the scattered information about school materials, supplies, and equipment, and to place this in an educational setting, which includes the principles of selection and use and discussion of sources, care, and method. The study is planned for the entire elementary school from the kindergarten through the sixth or seventh grades. The educational background is that of John Dewey, Frederick G. Bonser, and others of the same modern school. Professor Bonser contributes an introduction to the volume.

MURSELL, JAMES L. Principles of musical education. New York, The Macmillan company, 1927. xvi, 300 p. 8°. (Experimental education series, ed. by M. V. O'Shea.)

These pages present a comprehensive study of the methods, the aims, and the agencies of musical education, based on our current scientific knowledge of the psychology of music.

OGBURN, WILLIAM FIELDING, and GOLDENWEISER, ALEXANDER, eds. The social sciences and their interrelations. Boston, New York [etc.] Houghton, Mifflin company [1927] viii, 506 p. 8°.

Much study is deservedly being directed at present to the interrelations and educational bearings of the social sciences. Last month a volume by Edgar Dawson and others, on teaching the social studies was mentioned in this department of

School Life, and the present book treats the same group of subjects more widely, with particular attention to their interrelations. It comprises a score or more of essays by various specialists in their respective fields and illustrating diverse points of view. The work aims to present an integral picture of the present interrelations of the social sciences, with particular reference to the United States, and to set forth the potentialities for future developments. The prevalence of specialization in individual social sciences emphasizes the need for a manual like this to orient the student in a comprehensive view of the entire field. William H. Kilpatrick, of Columbia University, contributes a chapter on "The social sciences and education."

OSBORN, HENRY FAIRFIELD. Creative education in school, college, university, and museum. Personal observation and experience of the half century, 1877-1927. New York, London, Charles Scribner's sons, 1927. xiv, 360 p. front., plates (ports.). 12°.

A selection of 40 or 50 of the author's educational addresses, some historical and others relating to present conditions, grouped here by topics, and furnished with an entirely new introduction and closing chapter.

SYMONDS, PERCIVAL M. Measurement in secondary education. New York, The Macmillan company, 1927. xvii, 588 p. tables, diagrs. 8°.

Measurement in secondary education, according to this book, makes use of certain facts and principles which are different from those in the older and better established measurements in the elementary school. These conditions raise specific problems, which the author notes, in connection with the use of derived units in interpreting test scores, in the grouping of pupils, in marking, and in prediction and guidance. The book holds that a truly scientific use of measurements in the high school awaits the development of standardized tests in the high-school subjects. Informal tests, however, are recognized as important and essential instruments which must be used until they can be replaced by standardized tests.

THOMAS, CHARLES SWAIN. The teaching of English in the secondary school. Rev. ed. Boston, New York [etc.] Houghton, Mifflin company [1927] xxii, 604 p. 12°. (Riverside textbooks in education, ed. by E. P. Cubberley.)

In this new edition the general theory on which this text was founded 10 years ago remains intact. The newer portions are largely in the nature of amplifications. A separate section is now devoted to spelling. Another new chapter takes up the topic of scales and measures. Suggestions for précis writing are included, and a fuller bibliography and a list of study questions have been added for each chapter.

TIPPETT, JAMES S., and others. Curriculum making in an elementary school, by the staff of the elementary division of the Lincoln school of Teachers college, Columbia university. Boston, New York [etc.] Ginn and company [1927] vi, 359 p. front., illus., tables, diagrs. 12°.

Ten years have passed since work at the Lincoln school of Teachers college began. This book is the first combined effort to give a rather comprehensive view of the whole elementary division of the school. The staff of the elementary division has cooperated in producing this record, in which each member has contributed, planned, and criticized.



ENCOURAGE SPIRITUAL AND INTELLECTUAL FREEDOM

THAT TEACHER is greatest who creates within the school an atmosphere of freedom, growth, and responsibility. That principal is greatest who gives teachers the maximum freedom and who secures the largest growth and self-imposed responsibility. That superintendent is greatest who is most able to develop principals and teachers and to keep them free in their work with the children. That system of city or State supervision is best which fosters the finest adaptation of the schools in each local community to the highest needs and ideals of that community. ¶ There is still much in our educational practice that belongs to the middle ages, but steady and substantial progress is being made in the direction of wiser and more wholesome methods of handling people. This is nowhere better illustrated than in the attitude toward the punishment of children. The old supervision through its system of punishments sought to enslave the spirits of children. The new supervision seeks to free them spiritually and intellectually.

Cornelia S. Adair, President National Education Association





NEITHER DEMOCRATIC NOR SCIENTIFIC TO TREAT ALL CHILDREN ALIKE

THE PUBLIC SCHOOLS are our Nation's greatest guaranty of equal opportunity in adult life. To treat all children alike, once our dogma in school management, is to do the opposite of the right thing. Modern biology and psychology have shown us that young people are individuals, each one different from the other in degree and quality of power. There is no more undemocratic doctrine than to treat them all alike. Treat them all differently would be nearer right. But the difference of treatment should be based on a realistic and, if possible, scientific knowledge of what their mental differences are. There is nothing undemocratic about psychological or achievement tests, or subdivision of classes into sections differently speeded or specialized. They are essential methods in giving each child's personality a chance to get as near 100 per cent development of that heredity which God and his ancestors gave him.

Henry Suzzallo

